

CLAIMS

The embodiments of the invention in which an exclusive property or right is claimed are defined as follows. Having thus described the invention

5 what is claimed is:

1. A wireless fixture system, comprising:

an antenna block comprising a plurality of grooves, wherein said
10 plurality of grooves maintain a plurality of antennas located on at least one portion of said antenna block; and

a top locator block located above said antenna block, wherein said top locator comprises a top surface having depression thereon for receiving and
15 locating a patch, which can receives wireless signals from said plurality of antennas for sensor testing thereof.

2. The system of claim 1 further comprising:

20 an antenna cover connected to said antenna block for protecting said plurality of antennas and wiring thereof

a BNC connector that protrudes from said antenna block and is electrically connected to said plurality of antennas via said wiring thereof.

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3. The system of claim 1 wherein said patch comprises a SAW sensor and an RFID tag over-molded into said patch.

4. The system of claim 3 wherein said patch comprises a rubber
30 material.

5. The system of claim 3 wherein said antenna block comprises a

material that is not affected by RF signals.

6. The system of claim 3 wherein said antenna cover comprises a material that is not affected by RF signals.

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7. The system of claim 1 wherein said top locator block is formed from an amorphous thermoplastic polyetherimide material.

8. The system of claim 1 wherein said plurality of grooves comprises two 10 grooves.

9. The system of claim 8 wherein said plurality of antennas comprises two antennas.

15 10. The system of claim 1 wherein said antenna block, said antenna cover and said top locator block each comprise a rectangular shape.

11. A wireless fixture system, comprising:

20 an antenna block comprising a plurality of grooves, wherein said plurality of grooves maintain a plurality of antennas located on at least one portion of said antenna block;

25 a top locator block located above said antenna block, wherein said top locator comprises a top surface having depression thereon for receiving and locating a patch, which can receives wireless signals from said plurality of antennas for sensor testing thereof, wherein said patch comprises a SAW sensor and an RFID tag over-molded into said patch;

30 an antenna cover connected to said antenna block for protecting said plurality of antennas and wiring thereof; and

a BNC connector that protrudes from said antenna block and is electrically connected to said plurality of antennas via said wiring thereof.

12. The system of claim 11 wherein:

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said patch comprising a rubber material;

said antenna block comprises a material that is not affected by RF signals;

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said antenna cover comprises a material that is not affected by RF signals; and

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said top locator block is formed from an amorphous thermoplastic polyetherimide material.

13. A wireless sensor fixture method, comprising the steps of:

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providing an antenna block comprising a plurality of grooves, wherein said plurality of grooves maintain a plurality of antennas located on at least one portion of said antenna block; and

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positioning a top locator block above said antenna block, wherein said top locator comprises a top surface having depression thereon for receiving and locating a patch, which can receives wireless signals from said plurality of antennas for sensor testing thereof.

14. The method of claim 13 further comprising the steps of:

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connecting an antenna cover to said antenna block for protecting said plurality of antennas and wiring thereof;

providing a BNC connector that protrudes from said antenna block;
and

5 electrically connecting said BNC connector to said plurality of
antennas via said wiring thereof.

15. The method of claim 13 further comprising the step of configuring said
patch to comprise a SAW sensor and an RFID tag over-molded into said
patch.

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16. The method of claim 15 wherein said patch comprises a rubber
material.

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17. The method of claim 15 further comprising the step of configuring said
antenna block to comprise a material that is not affected by RF signals.

18. The method of claim 15 further comprising the step of configuring said
antenna cover to comprise a material that is not affected by RF signals.

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19. The method of claim 13 further comprising the step of configuring said
top locator block from an amorphous thermoplastic polyetherimide material.

20. The method of claim 13 further comprising the steps of:

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configuring said plurality of grooves to comprise only two grooves;

configuring said plurality of antennas to comprise only two antennas
respectively associated with said two grooves; and

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configuring said antenna block, said antenna cover and said top
locator block to each comprise a rectangular shape.